Appl. No.

09/875,447

Filed

June 4, 2001

REMARKS

Applicants respectfully request entry of the instant Preliminary Amendment. The priority

claim at page one of the specification has been amended to refer to the correct filing date of the

priority document, provisional patent application no. 60/253,418. Applicants provide herewith a

Supplemental Declaration under 37 C.F.R. § 1.67 that shows the correct November 27, 2000,

filing date for that priority document.

All of the proposed changes to the claims are supported in the specification and thus there

is no issue of new matter. According to the PTO PAIR database, this application has not vet

been docketed for examination. Therefore, Applicants respectfully submit that entry of the

instant Preliminary Amendment is proper because such entry will not interfere with the

preparation of a first Office Action. See 37 C.F.R. § 1.115.

Please charge any additional fees, including any fees for additional extension of time, or

credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted.

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Dated: August 9, 2002

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Specification

At page 1, lines 7-9, the priority claims has been rewritten as follows:

This application [is a Continuation-In-Part of pending] claims priority to U.S. Provisional Patent Application [entitled "Wavefront Aberrator", Serial Number] No. 60/253,418, filed November [6] 27, 2000.

In the Claims

Please rewrite Claims 1-18 as follows:

1. (Amended) A <u>system for making a wavefront [modifying device] aberrator,</u> comprising:

a layer of optical material comprising a monomer and at least one polymerization initiator, and

[wherein the spatial distribution of said index of refraction over a predetermined area of said layer is controlled by] means for controlling the extent of curing of the optical material by a radiation source at predetermined sub-regions inside [the area] said optical material to thereby produce a wavefront aberrator having a varied index of refraction.

- 2. (Amended) The [device in] system of claim 1, further comprising two transparent plates, [wherein] said optical material [is] being contained between said plates.
- 3. (Amended) The [device in] system of claim 2, further comprising a barrier between said plates confining said [epoxy] optical material within a predetermined volume.
- 4. (Amended) The [device in] system of claim 1, [further] said radiation source comprising a LED array panel having a plurality of LED elements operatively disposed to

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<u>irradiate said optical material</u>[, wherein curing of said epoxy layer is controlled by the irradiating of said epoxy layer with said LED array panel].

- 5. (Amended) The [device in] system of claim 4, said means for controlling the extent of curing [further] comprising a control unit controlling the emission intensity and irradiation duration of each of said LED elements in the LED array panel.
- 6. (Amended) The [device in] system of claim 5, said means for controlling the extent of curing [further] comprising a de-magnifier[, imaging] operatively disposed to image a predetermined area of the LED array panel onto a predetermined area of the [epoxy layer] optical material.
- 7. (Amended) The [device in] system of claim 1, [further comprising a] said radiation source emitting radiation having at least one wavelength within the absorption band of the polymerization initiator[, initiating a polymerization process].
- 8. (Amended) The [device in] system of claim [1] 7, said means for controlling the extent of curing [further] comprising a spatial light intensity modulator[, wherein curing of] operatively disposed to control the spatial distribution of the [irradiation] radiation emitted by said radiation source[intensity and exposure duration].
- 9. (Amended) The [device in] system of claim 8, [wherein] the spatial light intensity modulator being [is chosen from a list comprising:] selected from the group consisting of [(a)] LCD array panel, [or] [(b)] photographic film, [or] and [(c)] film with a printed profile for transmitting the [irradiation source] radiation.
- 10. (Amended) The [device in] <u>system of claim 1</u>, [further] <u>said radiation source</u> comprising a laser unit <u>operatively disposed to direct a laser beam [wherein curing is achieved by directing the beam of the laser at a predetermined area of epoxy layer] <u>at said predetermined subregions inside said optical material.</u></u>

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- 11. (Amended) The [device in] system of claim 10, said means for controlling the extent of curing [further] comprising a beam scan unit scanning independently in two dimensions to thereby [addressing any] address [predetermined location at the epoxy layer] said predetermined sub-regions inside said optical material.
- 12. (Amended) The [device in] system of claim 11, said means for controlling the extent of curing further comprising an intensity control for the laser unit.
- 13. (Amended) The [device in] system of claim 1, said means for controlling the extent of curing [further] comprising a [radiation intensity monitor unit] wavefront sensor operatively disposed to measure [measuring the spatial distribution of] the radiation [intensity transmitting] transmitted through the [wavefront modifying device] optical material.
- 14. (Amended) The [device in] system of claim 13, said means for controlling the extent of curing further comprising a computer in a feedback loop, said computer monitoring the radiation intensity and controlling the extent of curing by controlling the intensity and the duration of the radiation exposure.
- 15. (Amended) The [device in] system of claim 1, wherein said optical material comprises epoxy.
- 16. (Amended) The [device in] system of claim 2, wherein one of the transparent [plate] plates has refractive power selected from the group consisting of [which can be either positive power, or negative power, with or without cylindrical power] positive power with cylindrical power, negative power without cylindrical power, negative power without cylindrical power, and combinations thereof.
- 17. (Amended) The [device in] system of claim 2, [wherein] at least one of the [plate] plates [can be are either] being rigid[or flexible].

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18. (Amended) The system of claim 2, wherein the plate is comprised of <u>a</u> [salt or other] material which is removable by dissolving.